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ABSTRACT

One of the important factors contributing to the current interest in the development of social competence in preschool children is the acceptance of such competencies as appropriate outcomes in the evaluation of preschool intervention programs. Measurement of social competence is still in an early stage of development. One problem is that behavioral descriptions are not easily applied to measurement of social competence. Another problem is that certain behaviors, such as pro-social behaviors, occur so rarely in the natural spontaneous events of the nursery school that measurement is almost impossible. Until recently there has been little research on basic cognitive processes involved in the development of social behavior in very young children. Lack of attention to young children was due to evidence which seemed to indicate that very little social development was possible until after the shift to cognitive operations which occurs when children are between 5 and 7 years of age. Recent work, however, suggests that major shifts in social competence do take place in the 3-5 year age period, and that this is a particularly fruitful time to focus new measurement approaches. (Author/SS)

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On the Development of Social Competence

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It is likely that one of the important factors contributing to the current interest in the development of social competence in young (preschool) children is the acceptance of such competencies as appropriate outcomes in the evaluation of preschool intervention programs. As Zigler and Trickett (23) have recently pointed out, the first few years of Head Start national evaluations emphasized school achievement-related kinds of outcomes. These included global IQ measures on the grounds that such generalized aptitudes were the best predictors of academic performance. Unfortunately, very little evidence of change in these domains could be associated with preschool experiences in most of the large scale national studies and it was Zigler, as Director of the Office of Child Development, who was most influential in turning to the social domain as a central focus for the national evaluations. The very important work in summarizing the state of measurement in these areas, Anderson and Messick, (2) and Raizen and Bobrow (15) resulted largely from his urging, but the state of affairs described in these works was not encouraging. Useful (i.e., standardized, normed) tests in this area are not available, ratings of children by teachers or parents are filled with confounding factors and low reliabilities, and direct observations of children present massive problems of behavioral definitions and prohibitive costs. It is clear to this writer that measurement of social competence is still in a highly developmental stage. It is the purpose of this short

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survey of some of the issues involved to suggest some reasons why this is so, and to suggest a direction for future work. In the course of this presentation, it will also be suggested that major shifts in the social competencies of preschool children take place during the early preschool years (i.e., during the 3-5 year period) and that this is a particularly fruitful time in the lives of young children to focus new measurement approaches.

It should also be noted that until recently, research on basic cognitive processes involved in the development of social behavior in very young children was not a major focus in the developmental literature. We will suggest that this lack of work stemmed primarily from evidence that seemed to indicate that very little true social development was possible until after the 5-7 year shift to concrete operations and to the cognitively stable world on which this stage is based. We shall review a little of this evidence that implies a lack of cognitive basis for social development unitl after the 5-7 shift, and which appears on the face of it to be somewhat inconsistent with the conventional wisdom of experienced teachers and parents. Recent work in the development of social cognition indicates a different view of this developmental process and one which has some implication for the measurement of social competencies in program evaluations.

In order to demonstrate why measurement of social competence has been so difficult, it is useful to briefly examine the meanings of the term. In the broadest sense, social competence means the

skill with which an individual negotiates with other people to accomplish his/her purposes. One way of looking at social skill is to establish categories of behaviors which describe the mode of interaction with others. Thus, pro social behaviors describe the cooperating, sharing, supportive actions which children direct at one another. Anti-social behaviors imply the opposite mode of interaction having to do with aggressiveness, hostility, selfishness. Although there might be reason to believe that pro social behaviors are better in some way than anti-social behaviors, it is not clear that children who are more pro than they are anti are more skilled or competent than children who are more anti than they are pro. It might be argued that the pro behaviors are taught, rewarded, or idealized by teachers and parents and therefore should be exhibited more often by more mature children. However, it is also clear that parents of many preschool children, particularly parents involved in preschool interventions (i.e., low income parents) may prefer what looks like anti social behaviors for their children. Such parents may not, however, consider fighting back, refusing to share what is rightfully one's own, agressively resisting intrusive behavior from others as anti-social. These behaviors may be thought of as necessary tools required for accomplishing one's purposes in a hostile world. The point is not that prosocial behaviors may be better or not in some developmental sense, but that there is a great deal of ambiguity in any <u>behavioral</u> definition of competence.

Much the same can be said for power-oriented behaviors such as leadership and submissive behavior. These are highly situationally

defined behaviors for preschoolers (as they are for most adults), and it is difficult to know how they can be expressions of competence as a trait without knowing precisely what the situation is in which the child is attempting to accomplish his/her purposes. Coping skills, which also describe how children negotiate with others have the same problem of ambiguously representing competencies. Thus, independence and autonomy are not easily distinguished from dependency conflict which means an inability to ask for help when it is appropriate rather than a desire to do things on one's own. Autonomous children along with conflicted children do not take assistance from others, but under very subtly different conditions which require a good deal of clinical knowledge to understand. Once again, the point is that behavioral descriptions, whether in narrow action-defined units such as hostility, or in broader trait-defined units such as autonomy are not easily applied to the measurement of the growth of social competencies.

Still another problem in the measurement of pro-social behaviors is that, at least for the preschooler, such behaviors occur so rarely in the natural and spontaneous events of the nursery school that reasonable measurements are almost impossible. Thus in a recent large scale study of day care in which several thousand children were observed using an instrument which recorded as full a range of behavioral codes as is feasible for a highly trained observer, pro social behaviors (helping, sharing, comforting) occurred no more than .1 - .2% of the total codes (ABT, 1). Changes in the rate of occurance of these

behaviors as a function of time and program could not be measured because of the rarity of the behaviors. This is not to say that the behaviors do not occur. It is likely that there are few opportunities in the normal nursery school routine for such behaviors to be exhibited even though children may be acquiring a good deal of understanding of the needs of others. Yarrow (21) who looked for and recorded only the pro-social behaviors in observations of free play found a somewhat higher rate of occurance but these behaviors were still so rare that substantial relationships with age could not be found. Some important but weak relationships among the behaviors were reported but the identification of patterns with small amounts of the phenomenon at hand is difficult indeed. In order to increase the visibility of the behaviors Yarrow (22) and her associates also developed contrived situations in which children were faced with an option to act in a prosocial way or to make judgments about scenes involving prosocial behaviors. This approach is a significantly more productive one and some relationships between age, nurturance of the caregiver, and social competencies were found. However, some of the behaviors were related to age and some were not. Some were related to the conditions of the experiment and some were not. This is not surprising in the light of the ambiguity of meaning of many of the behaviors under study.

Perhaps this point will come clearer if we turn to another way of looking at social skill development. It would be useful to consider here the cognitive competencies which are likely to be involved

in the emergence of socially competent behavior.

In order to negotiate with another to accomplish one's own purposes it is necessary that the character of the other as a psychological being be cognized. The most critical fact about another person who is to participate in the accomplishment of one's own purposes is that person has purposes of his/her own. Indeed, the unique property of personhood as opposed to thinghood is that a person is perceived as self-caused and directing behaviors toward goals which are self selected. The other person has intentions which generate generate behavior and he/she has knowledge of the environment which guide behavior in the accomplishment of those intentions. One must have access to the intentions of the other, one must understand the reasons for actions as those reasons are located in the psychological state of the other, and one must understand what the other sees in his/her environment while he/she behaves, in order to involve the other in the accomplishment of one's own purposes. Cooperating with another requires that you know that the other has the same goal as yours even though his/her behaviors are not identical with yours. When you act in a cooperative manner, you must know that the other understands the intentions underlying your behaviors before you can develop expectations of his/her responses to your actions. When both you and the other know that both of you have the same intentions it is then possible to coordinate your respective behaviors to accopmplish your common goal. Cooperation, as one of the most complex forms of pro-social behavior, clearly requires a great deal of

information exchange and a great deal of verification (feedback) of accurate receipt of information sent. Once again, in order to cooperate, it is necessary that both persons have access to the understandings of the other as well as to the intentions of the other. Although we have been describing cooperative behavior, it should be obvious that virtually all interchanges among people in which each is attempting to accomplish his/her own intentions, regardless of whether the interchange is characterized as pro or anti social, have these same components. The following is a short summary of the cognitive functions involved in mature social behavior as described above:

a. Identification of the self caused intentionality of the other person

b. Identification of the psychological states of the other person

c. Identification of the knowledge of the environment which is acquired by the other

d. Information exchange and verification (communication)

Clearly this does not exhaust all properties of social cognition. The point, however, is that these congitions are not the same as behaviors, and do not suffer from the ambiguity of meaning which behavioral analyses suffer. It will be instructive to examine some issues involved with these cognitive competencies.

Until recently the literature on cognitive development did not support the notion that the cognitive basis of social competence was present in the preschool child. Piaget (15) has demonstrated that the

cognitive operations which need to be applied in order to draw logical inferences about causal relations are not yet developed in the preschool child. Indeed, the pre logical and the egocentric view of the world held by the preschool child should, in this view, preclude the possibility that other people could appear to be self caused or independently intentional. One of the central properties which a self intending and self-caused other person must have in the cognitive system of a person is a consistency of identity over time and space. The other person must remain the same in a variety of conditions and must have a constant identity even when not directly apprehendable by the perceiver. In other words, object constancy must be characteristic of the cognitive structures of the person and this appears not to be the case prior to the 6-7 year status of young children (Flavell, 6).

The lack of object constancy and the inability to deal with concrete operations (including a lack of number conservation and seriation) suggests that the preschool child is not yet ready to seriously apprehend the intentionality of people. In a review of findings in the non-Piagetion literature several years ago, White (20) marshalled a strong argument that the 5-7 years represented a major moment of transition in the development of a great range of cognitive processes. He cited studies from almost 20 areas of investigation ranging from transposition, memory, and classical conditioning to longitudinal correlation of IQ and achievement to generate the notion

of this period as a time of major shift. Preschoolers simply do not manipulate the relationships among forms and quantities in the ways that school aged children do. In addition, having an immature verbal repetoire means more that having a small vocabularly. It means that the structure of the minimally verbal mind is qualitatively different from the structure of the verbally mature mind. For example, the accuracy with which preschool IQs can predict school aged academic achievement is quite low and remains so until a sudden leap to maximum predictive efficiency of IQs taken at age 7. These are impressive data to support the notion of a deep transition at this age. White does acknowledge the possibility that the age at which the transition takes place may be a function of the age at which schooling starts in western cultures and suggests that the issue will not be fully settled until evidence for such transitions is sought in cultures which do not introduce institutionalized schooling at six years.

The significance of this transition for the cognizing of people is most clearly revealed in the development of non-egocentric behavior. This is central to the emergence of socially competent behavior in the sense that we have been discussing it. To be able to recognize that others have intentions and purposes that are not dependent upon one's own intentions, that others have a view of the world and information which guides their behavior which is not the same as one's own; is to cognize others as truly purposeful beings with whom mutual interaction is possible. Typically, the investigation of these cognitions has focused on the development of perspective taking behavior. The

question is, can children who have not completed the 5-7 shift recognize the view of the world held by people whose vantage point is different from one's own? Using an experimental procedure which has since become almost standard for this problem, Piaget and Inhelder (14) presented scenes of three mountains on each of which a figure was located. The task was to identify the view of the mountains held by each of the figures. The response mode is a series of photographs representing a variety of views of the mountains. The child's task is to select the photograph which shows the view available to each to each figure on each of the mountains. The task is not accomplished correctly by children until the 6-7 year shift. Preschoolers typically select photographs of their own view to represent what other people see.

It has been on the basis of these data that the preschooler has been judged to be flatly egocentric and not yet ready to acquire true social skills. Indeed, until recently cognitive theorists have considered social development in the preschooler to be a wasteland for research. The assumption seems to have been that there is an all or none relationship between the emergence of concrete operations and social competence and that it is reasonable to wait until the child is past the 5-7 shift before serious work in social development can be done.

The problem with this notion is that it is somewhat inconsistent with the conventional wisdom of teachers and parents, on the one hand, and the persistent observation of nursery school behavior by researchs such as Yarrow on the other. From this perspective,

the all or none notion seems overly simplified. Indeed the recent literature has begun to accumulate evidence for an alternative to the traditional sequence of nonegocentric development. Two of the more interesting models of social cognition development have been presented by Selman (16) and by Flavell (6). We shall briefly summarize that that of Flavell's because it is a little more directly related to our present concerns. His model has four steps:

1. Awareness of the existence of psychological states in people. Piaget has pointed out that the young child does not reflect upon his own or others psychological states and when asked to describe others does not use psychological states or properties as descriptors until after 4 yours. There is however a difference between knowledge of psychological states as distinct from knowledge of their labels.

2. Need to use the psychological states of others in some interchange with them.

3. Capacity to make inferences about the states of others.

4. Application of inferences about the states of the other in adjusting one's own behavior with respect to the other.

A model such as this suggests that awareness of, and a need to use, the states of others take developemntal precedence over the capacity to make inferences which precedes, in turn, the ability to apply inferences to one's own behavior. These notions carry important implications for what ought to be measured if one wishes to study the effects of programs designed to stimulate the development of social competences. Much more important, however, is the

idea that social cognition may in fact be developing discernibly in preschoolers even while they remain preoperational. It suggests that non-egocentricity may not be tied to the acquisition of concrete operations. Some evidence to support this view is available.

1. Verbal Misunderstandings. It is commonly observed that preschool children who are asked to explain a phenomenon with the questions "how" or "why" (e.g., "Why did you pick that one?") often respond with what appears to be an egocentric response. Blank (3) provides an interesting set of data which suggest that the child is likely to be misinterpreting the "why" question as a request for his motivation in choosing rather than a request for his understanding of the mechanism involved in the phenomenon. If the task is changed to use "which" questions in order to make clear the intent of the question, then 4 year olds have no difficulty in providing relevant and accurate accounts of their size and shape discrimination judgments. What is ordinarily taken for egocentricity may in fact be an artifact of the experimental procedure. Indeed Donaldson and Wales (5) have shown that even 2"1/2 year olds may know the difference between "same" and "different" despite the fact that when asked to give a second object to the experimenter that is different from the first, they deliver another object which is the same as the first. Donaldson and Wales make it clear that the child is interpreting "different one than this one" as "another one like this one." When rephrasing the request to "give me an object which has a different color than this one" 2 1/2 year olds have no difficulty in responding appropriately. Evidence for egocentricity based on

these kinds of questions may mask the fact that preschoolers are considerably less egocentric than the research on concrete operations has led us to believe.

2. Role-Based Communications. Shatz (17) has shown that 4 year olds talk much more complexly to adults than to 2 year olds. Indeed, speech is not only different in syntactical form when addressed to immature than to mature speaker/listeners, but the content of messages is appropriately different as well. When talking to 2 years olds, their speech is in the form of show and tell messages. When talking to adults, they ask for information, guidance, acknowledgment. What is important here is that these children can perceive the differences in the capacities, skills, and knowledge held by people in the roles of younger and older than themselves. The messages directed to the listeners are appropriately designed to match the understandings of the other and in this sense, 4 year olds show both a need and a capacity to infer the cognitive states of others.

In another age/role discrimination study Shatz (17) sought to determine if preschoolers could take the characteristics of others in account in making decisions about giving presents. She asked 4 and 5 year olds to choose from a group of toys those which they thought would be right to give to 2 year olds and 4 year olds. Most of the choices made were age-appropriate and almost all of the explanations for the choices were based on accurate matching of the properties of the toys and the capacities of the designated recipient. Since this study involved pictures of the recipients

rather than conversations with them, this selection of the appropriate toy must have been made on the basis of the representation of the others in the mind of the child, and not guided by any responses that might have been made by the recipients themselves. It seems clear that by 4 years, most children have a picture of the range of skills and abilities which characterize people in a wide variety of age related roles. In addition, Markman (9) has shown that 5 year olds have an accurate understanding of the motor capacity of 2 year olds. At the same time, these subjects judged 2 year olds as having very poor memory. That is, these children selected from a series of graded jumping tasks which distance 2 year olds could jump, and they also indicated from a series of graded memorial tasks, that 2 year olds could remember almost nothing. This is both complex and accurate knowledge about the capacities of other people which could hardly be acquired by totally egocentric children.

3. Perspective Taking Skills. The major set of data indicating that preschool children cannot slough off their egocentrism when asked to look at the world from the perspective of others is the Piaget and Inhelder three mountain task (14). At least one investigator, Borke (4), has argued that the difficulty which young children have with this task is confounded with the response format and the familiarity of the stimulus materials to the children. Selecting photographs representing the several views may be a particularly difficult way of having the children show what they know of others perspectives. This might be an instance of the child knowing more than he can or wants to show. It might also be a matter of incomplete

development of a skill similar to stage 5 of object-concept development in which the child can deal with visible displacements of an object but cannot yet deal with the invisible displacements. Borke developed much more familiar scenes and allowed then to be rotated until the child physically reproduced the scenes as viewed from different perspectives. She also included a rotatable version of the original three mountains. Under these conditions 4 year olds were able to accurately identify the views from the several perspectives and indeed the majority of 4 year olds were even able to correctly deal with the three mountains. Under appropriate conditions, it seems clear that perspective taking is part of the repetoire of the preoperational child.

Several other demonstrations of this finding have recently been reported. Meissner and Apthorp (10) showed that when preschoolers were asked to explain their choice of toys to a blindfolded listener, they did not point to the toys as they did when explaining their choice to listeners who were not blindfolded. In a very interesting study, Mossler, Marvin, and Greenberg (12) showed 4 year olds a videotape of a boy explaining that he wanted cookies. The subjects mother was then introduced into the room and the video tape rerun but this time the audio portion was turned off. The 4 year olds could then correctly indicate that the mother knew about the action on the tape but that she did not know of the desire for the cookies because she did not hear it. Menig-Peterson (11) had 4 year olds describe to their teacher a conversation they had with an adult. In

one condition, the teacher was present throughout the conversation and in another condition, the teacher was present for only part of the conversation. These children correctly adjusted the content of their description of the conversation depending upon experimental condition. Finally, Lempers, Flavell and Flavell in an extended investigation of the knowledge of other's visual-attentional acts and abilities held by very young children (7) showed that virtually none of the 1-3 year olds in their study showed clear egocentricity on their tasks. For example, in explaining the content of a photograph to another, none of the 3 year olds and very few of the 1 year olds oriented the picture so that only they could see it. They always knew that the picture had to be oriented away from themselves in order that the other person get an appropriate view. Thus by 3 years all children could recognize the difference between the view of the world held by themselves and by the other well enough to successfully communicate relatively complex information. These are impressive data supporting the notion that 4 year olds can make non-egocentric inferences about the perspectives of others. There seems, in other words, to be evidence that the developmental processes that underlie the acquisition of social competencies may not necessarily be same as those which lead to the acquisition of concrete operations.

Indeed, at least one aspect of the evidence reviewed above seems to suggest that there is a unique feature to the development of social competencies. In almost every instance 4 year olds have

achieved significant maturity in these competencies whereas 3 year olds are still quite immature. There is a strong temptation to conclude that a 3-4 year shift occurs in this area comparable to the 5-7 shift found in the development of concrete operations. Obviously the full develop of social skills has not occurred by 4 years, but it seems clear that much of the cognitive basis for such a development has been accomplished. To be sure, most of these studies involve children attending preschool and until an examination of the effect of such experiences is completed it is not possible to be definite about the timing of this shift. The preschool experience is probably a major factor in this phenomenon since it provides unique collectivites of peers which cannot be duplicated in the home. It is likely that there is an intensification of the discovery of the causes of behavior in such collectivities. As Shotter (19) has argued, and as we have suggested earlier in this paper, the cause of behavior is the reasons for its occurance which reside in the behaving person. It is, in other words, the intentions of the other that accounts for and makes explicable his actions. This is what distinguishes people as objects from things as objects. In attempting to negotiate with another intending person we necessarily reveal our own intentions to the other person. It is this mutual interchange of intentions that is the foundation for the construction of social reality and which leads to the performance of social behaviors and the acquisition of social competencies. The fact that collectivities of peers facilitiates this process

for the preschooler probably reflects the fact that the discovery of the relationship between intentions and behaviors is occurring more or less simultaneously in these children. That this is not the full story of the unique relationship which peers have with each other is evidenced by the strong fascination which peers as young as 18 months have for eacher (Lewis, 8). Apparently very young children can distinguish peers from among a wide range of others, and the special attraction they have for each other is apparent well before they have a need to explore the mutual adjustments of their individual purposes. Obviously the timing of the preschool peer collectivity can be critical and this needs to be explored as a facilitator of what we are here calling for convenience the 3-4 year shift.

Although it may still be a bit premature to call for the standardization of experimental procedures in the form of tests, it does seem obvious that new test development for program evaluation should focus on the cognitive processes underlying social competencies rather than on a count of potentially ambiguous behaviors. Perspective taking skills, the perception of role properties of others, understanding of the purposes which guide the behavior of others, and the understanding of rules, values, and social causes as the content of an objective social reality all constitute a rich set of competencies in the preschool child. They are established by 4 years, and continue to develop through the middle childhood years. They can be measured in standardized situations which do not depend upon the vagaries of

natural interactions. Finally, they should be directly responsive to preschool programming and might very well reflect variations in the content of such programs. It seems clear that this is the direction to take in the next step toward the development of theoretically, psychometrically, and public policy useful measures of social competence in young children.

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